

Advanced Trouble Shooting

1. Run Disk Utility

Why: Repairs flow of hard drive.

Link: <http://docs.info.apple.com/article.html?artnum=106214>



How: Put system CD in drive, restart holding down C, Installer program will run, open Disk Utility, choose Repair Disk Permissions & Repair Disk on HD.

2. Uninstall & Reinstall Application

Why: Sometimes it's better to start from scratch.

Link: Follow the instructions that come with that application.

How: Some can just be deleted; some you actually have to run an uninstaller program.

3. Re-image the Computer

Why: This wipes out the entire hardware and reinstalls a dependable version of the system and every program.

How: Connect the computer to an Ethernet cord, restart the workstation and hold down the "N" key. Choose the proper image to install on your computer, according to which unit the computer is from.

4. Reset Power Management Unit (Different for different computers)

Why: More comprehensive then Zapping the PRAM, fixes ports & sleep settings

Link: <http://docs.info.apple.com/article.html?artnum=14449>

How to Reset PMU (iBook): Shut down computer, hold down Shift + option + cntrl + power button for one second.

How to Reset PMU (Powerbook): unplug power adaptor, take out battery, hold down the power button for 5 seconds).

How to Reset PMU (iMac G5): Unplug power cord. Wait 10 seconds, plug in hold power button till plugged in

How to Reset SMU (MacBook): Unplug power cord. Take out battery. Push power button down for seconds.

5. Open Firmware

Why: Every software update is considered firmware; they must be

reconfigured from time to time.

How: restart, hold down F + O + option + apple buttons. A gray screen will show up. Type “reset-nvram”, then press enter button. Type “reset-all”, then please the enter button.

6. Use the Startup Manager

Why: This can often diagnose a problem, checking to see if the problem is hardware or software based, since you are starting up to a limbo place where no system has been chosen yet.



Link: <http://docs.info.apple.com/article.html?artnum=106178>

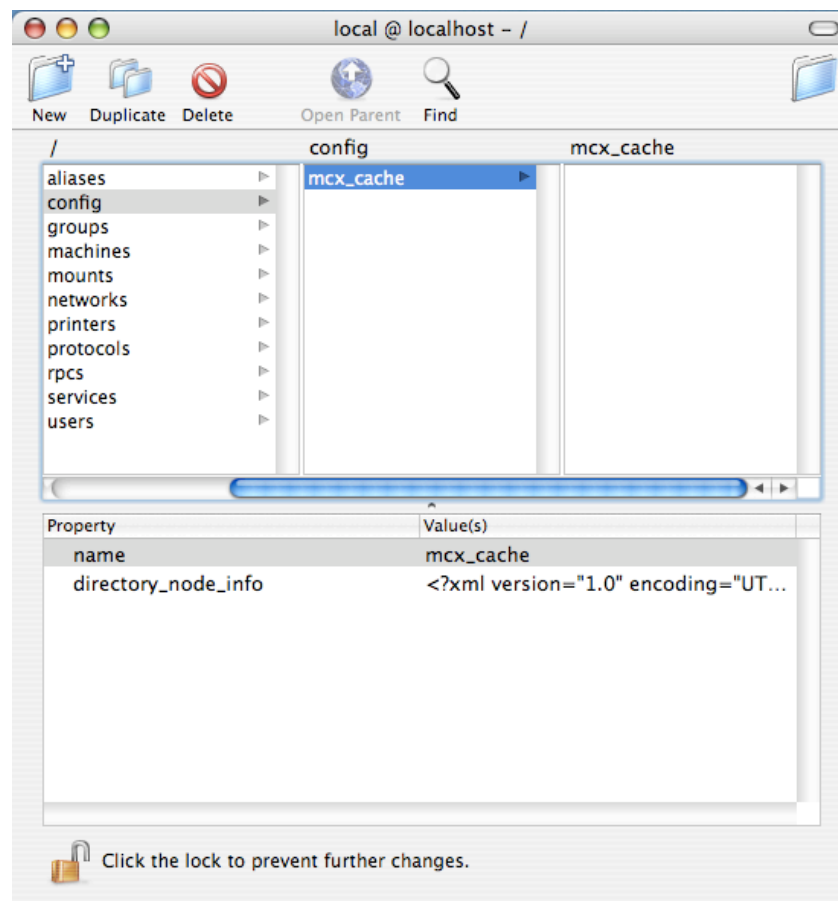
How: Restart, hold down Option button. Chooses where to start a system from.

7. Delete the MCX_Cache (Tech Staff only)

Why: Tech Guides suggested this when you are not able to re-image a computer for the network.

How: To delete the mcx_cache file. Log into the computer as the local administrator (Laptop). Launch Netinfo Manager. Click on the lock icon at the bottom left corner. Enter the username and password for the local administrator (laptop/xxxxxx). Click on the “mcx_cache” located in the middle column. Click on the delete icon in the toolbar. A window will pop up asking to confirm you want to delete the file, click yes or delete. Quit Netinfo Manager. Restart the computer.

NOTE: Be careful not to delete anything else in the Netinfo



Manager. Doing so may cause the computer to crash and require it to be re-imaged.

8. Restart in Safe Boot Mode

Why: The only runs the core Apple OS, no networking ability. This checks to see if an issue is in the main core app programs, and disconnects any 3rd party apps that may be interfering with the system

Link: <http://docs.info.apple.com/article.html?artnum=107392>

How: Hold Down the SHIFT key after you hear the chime of a restart, let go when you see the gear spinning on the gray screen. Gray Apple screen will go for a long time. A Log in menu will eventually come up with “Safe Boot” in red where the computers name usually is, under Mac OS X.



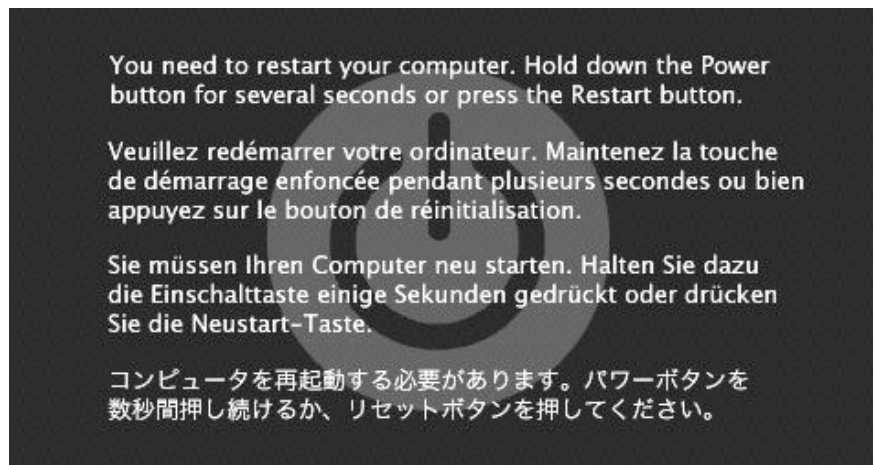
9. Partition & Reinstall System

Why: To Fix Kernel Panics

What: A kernel panic is a type of error that occurs when the core (kernel) of an operating system receives an instruction in an unexpected format, or that it fails to handle properly. A kernel panic may also follow when the operating system is not able to recover from a different type of error. A kernel panic can be caused by damaged or incompatible software or, more rarely, damaged or incompatible hardware.

Link: <http://docs.info.apple.com/article.html?artnum=106227>

How: Boot up from the CD. Open up Disk Utility from the Installer Menu. With that open, make sure the HD is being recognized. It will give you a list of the start-up volumes. Select the main HD of the affected machine. Click on the Partition tab. Where it says Current, move it to 5. Click Partition. Then go back to Current again, repeating the process and this time setting the Partition back 1. This process insures that you write over everything on the drive. Quit Disk Utility. Then reinstall



the current OS on the machine.

10. **Call Apple**

Why: Because you can't think of anything else to try, and it's free for schools.

Link: <http://www.apple.com/support/complimentary/>

How: Dial 1-800-800-2775.